

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/622,745

DATE: 06/28/2001

TIME: 10:42:28

Input Set : A:\Pto.amc

Output Set: N:\CRF3\06282001\I622745.raw

2 <110> APPLICANT: AstraZeneca AB
 4 <120> TITLE OF INVENTION: New methods
 6 <130> FILE REFERENCE: H 2174-1 WO
 C--> 8 <140> CURRENT APPLICATION NUMBER: US/09/622,745
 C--> 9 <141> CURRENT FILING DATE: 2000-08-22
 11 <160> NUMBER OF SEQ ID NOS: 2
 13 <170> SOFTWARE: PatentIn Ver. 2.0
 15 <210> SEQ ID NO: 1
 16 <211> LENGTH: 3903
 17 <212> TYPE: DNA
 18 <213> ORGANISM: Homo sapiens
 20 <220> FEATURE:
 21 <221> NAME/KEY: GC_signal
 22 <222> LOCATION: Complement((3009)..(3016))
 24 <220> FEATURE:
 25 <221> NAME/KEY: GC_signal
 26 <222> LOCATION: (3037)..(3044)
 28 <220> FEATURE:
 29 <221> NAME/KEY: GC_signal
 30 <222> LOCATION: Complement((3116)..(3123))
 32 <220> FEATURE:
 33 <221> NAME/KEY: misc_signal
 34 <222> LOCATION: (1497)..(1503)
 35 <223> OTHER INFORMATION: Pla
 37 <400> SEQUENCE: 1
 38 gatcatatta atttgaaggt ggcggggcag gatggttctg tgggtgcagtt taagattaag 60
 39 aggcatacac cacttagtaa actaatgaaa gcctattgtg aacgacaggg attgtcaatg 120
 40 aggcagatca gattccgatt cgacgggcaa ccaatgaaac agacacacct gcacagttgg 180
 41 aaatggagga tgaagatata attgatgtgt tccaacagca gacgggaggt gtctactgaa 240
 42 aagggaaacct gcttctttac tccagaactc tgttctttta agaccaagat tacatttctca 300
 43 attagaaaac tgcaatttgc ttccaccaca tcctgactac taccgtatag ttttctctat 360
 44 tctttcatTT ccccttccc catttcttta ctgtacataa agtaactggt atatgtgcac 420
 45 aagcatatta cttttttttt ttaaaactaa acagccaatg gtatgttttg attgacatca 480
 46 agtggagacg ggggggaaaa tactgattct gtgaaaatac cccctttctc cattagtggc 540
 47 atgctcattc agctcttata tttatattcc agtaagttat tttgctctca ctgttttaac 600
 48 aacaacaaca aaaaaacaac aacataaaaa tccttgcata ccttgttcaa ttggagaatt 660
 49 ttaatgtttt tcatttatca ttgtaaaacc aaggacaatt ttataacttt tttgtactta 720
 50 gctgttacat gcagagcaat ctgtctttta gtagggataa attactctaa aacaaaaaag 780
 51 aatcctagat agttttccct tcaagtcaag cgtcttgttg tttaaataaa cttcttgttt 840
 52 aaaaaaaaaa aaagtaaaaa agaaaagtta tgcaacaatt aatggcccag aggcaatcct 900
 53 tggttaacatt ttgatgcac ttttagctgt tttttttttt tttttttttt ttgactgagt 960
 54 ttgactcttg tcaccaggc tgaagtgcac tggcatggca tgatcttggc tcaactgcaac 1020
 55 ctccgctccc cgggttcaag tgattctcct gcctcagcct cctgagtagc taggattacg 1080
 56 ggcattgcacc accatgcctg gctaattttg tatttttagt agagttgggg cttctccaca 1140
 57 ctggtcaggc tggctctgaa ctcccaacct caggtgataa ggggaagggc actattgaca 1200
 58 tttatggttg gggcagaggt gtaagatatt cttcaaagca ctacctacat gttgaagaat 1260
 59 tgttctctac ccagattctc aaaagtcccc caggacattc acgtagttaa aacctgtgtt 1320

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/622,745

DATE: 06/28/2001

TIME: 10:42:28

Input Set : A:\Pto.amc

Output Set: N:\CRF3\06282001\I622745.raw

```

60 taattatctg agcctataac ttaatacagt tttaaaattt ttttttaa atacagtga 1380
61 ctttctagga atgcaattat agttgtgtgt aaaattaggg aaaattaact ttgtaccaa 1440
62 gagttgttca acattttgtt aaatcaactt attgatggca acatgctgga ggtagttgag 1500
63 tcaccaactc agcacctgga tcagcctgtg ttggtagcag tttcatcccc gtggttctgt 1560
64 gaataggtgg aagcatctgc ttactccatc aggacttcta gggtagtcgg gccttggcac 1620
65 tcacacatta aaatactgtt tatgttattt tattgcaagt tacttttctt tcatttcccc 1680
66 tttacgttac agaaagggaa gcattttgct ttctgtttaa agttgtgtat gtaggtaggt 1740
67 tatatcatct awgaactttt ctcctctcct ccttttctt ttgtttgaga tggagtcttg 1800
68 ctctgtcacc caggtctggag tgcagtgggt cgatcttggc tcaactgcaac ctctgcctcc 1860
69 cgggttcaag cgattctggt gtctcagctg ggattacagg cgcacaccat cacaccacgc 1920
70 taatttttct attttttagta gagatggggt ttcgccatgc tggccaggcc aggctggtct 1980
71 caaactcctg agctcaagt atcagtcgcg ctcggcctcc caaagttctg ggatttcagg 2040
72 cgtgagcctc atctatgaat ctcaatttag gacagtaaaa gtgtcattac aaaaaatatt 2100
73 attgtaaaaa aggtttggag gttgagaatc tcaattctag tcagtctctc agtgtttggt 2160
74 ttcttctctc catttttccc cctaggacca gccagaaagc agcttttttt ttgtcccccc 2220
75 caacaaggag cccactgttt cctctcccag cccaaactca ggcctacgaa caacaacagc 2280
76 actacacaca cacacacaca cacacacaca cacacacaca caccctcca cttcaaggta 2340
77 tagccaagag cttctggagc cgtcaaaaag gtctgtacct gctgtcttta gagcttccag 2400
78 tttgcccttg gtcaagaaat actgtttgct aggtctgtct ggagtacatc aggtataact 2460
79 ggcttctaaa ccacctgag gttcttttct cttgtccttt tactcccttc gtacttcaat 2520
80 ttctctcctt gatgtccccc tccctgtttt gttttttgcc tccaatccgt tctgcgcgtt 2580
81 cctgcagag caggcgagta gcaatgctgc tggaccatgg agctgtctta gtctccaga 2640
82 aatctcttct acaccaacc cttcttgccg ttaggtgggt ctcagtcccc ctccccacc 2700
83 tcttctgac ccaggttctt ttctcgccct ccggtcgcag ttctcctggg catctgcctc 2760
84 tgcctctctc ctctcacccg gatctagggc tgccttctct ttgtgcagcc gtctttctcc 2820
85 accttcatcc cagactccct gtctcagcgc cagctcctct gcctttggct cgggttccct 2880
86 ctccccacc ccagcttcca gttgtttggc ccgcaggctc ctcggcagtg accggcgccc 2940
87 ccgcagagtg gcgtgtgcac cagggcacct cctctcccc cactctcag ccccgccct 3000
88 ctccaccgcc cgcaccaccg cgctgtgggc ggtccagggc ggggctggga tccggggcgg 3060
89 ctcccggggc tcgggttggt ggaggcgccc tctccccggt cttccccctc cttccccccg 3120
90 cctgccttc ccttgacccc tcttcttcc ctccgcggg gagctctccc tgggtccccg 3180
91 cgccgcctcc ttcctcccg gctccccgt cccgcctccc gtggtgcgg ccgccccggg 3240
92 gaagaagaga caggggtggg gtttggggga agcgagagag gaggggagag accctggcca 3300
93 ggtgagagcc tggattcgag gggaggaggg acgggaggag gagaaagggt gaggagaagg 3360
94 gaggggggag cggggaggag cggccgggcc tggggccttg agggccgggg agagccgggg 3420
95 agccggggcc gcgcgccgag gtaagagcca gggccccggg ttagcagggc tcggagaggg 3480
96 ggcgcgcggc gtggtggggg agggggcagt gggcgaggg ccagctggg ggaagcgggg 3540
97 ctgggggaga ggaggaaccg cggggatgga atcggggagc gctgaggcgg ccgatgccgg 3600
98 gagcgtgggt aagccaggct tctgcgagcc gggggggccg ggggagagga ggtggtgaga 3660
99 ggtggagtcg gggagggttg ggggcccagg gaggcaggag gaggtgggg acaggcttct 3720
100 tctctctctc tccccccacc ccgcgcgggg ctccgcccc gcctcctccg cggggcgctc 3780
101 tcttggtccc caggtgagc ccggtcggag cctgcgagc aaccggcaag aggtcgagta 3840
102 gtctccgggt gcgggcgcgg ccggcggggc tcggtccagt cctcatggcc gcctctcact 3900
103 tag
111 <210> SEQ ID NO: 2
112 <211> LENGTH: 4594
113 <212> TYPE: DNA
114 <213> ORGANISM: Homo sapiens
116 <220> FEATURE:

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/622,745

DATE: 06/28/2001

TIME: 10:42:28

Input Set : A:\Pto.amc

Output Set: N:\CRF3\06282001\I622745.raw

```

117 <221> NAME/KEY: GC_signal
118 <222> LOCATION: Complement((4080)..(4087))
120 <220> FEATURE:
121 <221> NAME/KEY: GC_signal
122 <222> LOCATION: Complement((4196)..(4205))
124 <220> FEATURE:
125 <221> NAME/KEY: GC_signal
126 <222> LOCATION: Complement((4241)..(4249))
128 <220> FEATURE:
129 <221> NAME/KEY: GC_signal
130 <222> LOCATION: Complement((4272)..(4279))
132 <220> FEATURE:
133 <221> NAME/KEY: misc_binding
134 <222> LOCATION: (3844)..(3851)
135 <223> OTHER INFORMATION: AP-2
137 <220> FEATURE:
138 <221> NAME/KEY: misc_binding
139 <222> LOCATION: (4308)..(4315)
140 <223> OTHER INFORMATION: CRE
142 <220> FEATURE:
143 <221> NAME/KEY: misc_binding
144 <222> LOCATION: (4375)..(4381)
145 <223> OTHER INFORMATION: Initiator
147 <400> SEQUENCE: 2
148 atgttgctgc tgctgctact ggcgcacactc ttctctcgcc ccccgggcgc gggcggggcg 60
149 cagacccccca acgccacctc agaaggtgca tctttcttcg acgacctcg gccctccttc 120
150 gctccacttc cctttccctg catctcctca tttctggtcc tcatcactat cccatcagtc 180
151 ccacatatca tcccggtctg gcaacccctt ctgctcgcc cgactttact actgctgacc 240
152 tccttctgtc accccacgtt actatccagc acctcttttc tctgccaca ttgctacact 300
153 ataccacctt cctgtgcatt ttctcgcct caatccctt tcccagcccc acattactac 360
154 ctcaattact ccttttctt ggtcccact tgtgtccag atgatcttat tagcctccct 420
155 ttatcctcct atcctaattc aactggaata tctcattta gcctttttt ttaaagaaaa 480
156 gctccaccca catatcatac ccttcattgat ttcttaatta cttttcttcc ttacctccac 540
157 ccagcaccct tccctcccca cttgtgggtt ctctcatcag ctttaaccct ggccctttac 600
158 tctctgtcct ttagccaggg gatctgtacc tgtcccaact cccacctct agtgccccat 660
159 cctcttctct ctgtcccccag cctgccaca gaccacgccc tactctcccc ttctccccc 720
160 tggggagcct gccttttctt ctttcccacc attcctctct gtatgcctcc ccgactcacc 780
161 ccttaggttg ccagatcata caccgcctt gggaaggggg catcaggtac cggggcctga 840
162 ctccgggacca ggtgaaggct atcaacttcc tgccagtga ctatgagatt gagtatgtgt 900
163 gccgggggga gcgcgaggtg gtggggccca aggtccgcaa gtgcctggcc aacggctcct 960
164 ggacagatat ggacacaccc agccgctgtg gtgagtagcc tcggaagccc ctccctctt 1020
165 caagactatt ccttttctg ccgcaaactt agcattactg cttgcaagtc agcactttaa 1080
166 atccagtata ccaaaattca caaatacatt tattgaatga ctactacata agagcaattt 1140
167 tgctctgtgc ggttgagggt agtagagcta gcagcctgca cagttcattt catcctccct 1200
168 toattaggcc actgatcatt ggcctataac attgataatt catcttgta gttattctct 1260
169 ttgaggatca ttagtggcag atgatgacaa aaaaattcta aaatgatttc atcacatttt 1320
170 tgaatacctc tgtcaccaac ccagagacca tatgcccaag aaacaaaagc cagtttaata 1380
171 ttaatagaag ccaactataa taagaaaagc aaatctgatt gtgcatcaa agttatatac 1440
172 atctacatat ttcaaagcca gagaaccgcc cactgtagct gactttgaag agatcccat 1500

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/622,745

DATE: 06/28/2001

TIME: 10:42:28

Input Set : A:\Pto.amc

Output Set: N:\CRF3\06282001\I622745.raw

```

173 ttgtgtgctt atagcccat cttgggttcc taaaatggtta attttttttt tcttttggga 1560
174 atgtgtggat gcttgacacag gtaaggagg attggaagat aggtaggcaa atccttttca 1620
175 catgtgattt tctttagagc aggatgcttg tggacccaaa cctgcacctg agtccctgc 1680
176 tctttaaagg gaaagagcct tcttcaactc gcctctcttc ttattttcct atctctccac 1740
177 agtccgaatc tgcctcaagt cttatttgac cctggaaaat gggaagggtt tctgacggg 1800
178 tggggacctc ccagctctgg acggagcccg ggtggatttc cgggtgtgacc ccgacttcca 1860
179 tctggtgggc agctcccgga gcatctgtag tcagggccag tggagcacc ccaagcccca 1920
180 ctgccagggg gaggggaaca gctgcctgca tgcagctgat gaggacgctt gtgtgaggat 1980
181 gggagtgggg tgggaatgga taatgggaaa gaatggagag ctataaaaat gtgggggagg 2040
182 acactggaaa ggggagatga aagtccctt ttcctccatc acctgcctca aacttctct 2100
183 tgcagtcccc ggtatcctct gtaggttggg ggcttccctc ctttaccttt taaaaaata 2160
184 ttctgtctcc cgattcttag acctcacgtt ttctcttttc ctttatgaat ctcacctctc 2220
185 tcaccttctt caggtttaaa tactccaatt ttccctttct ctaaaacttag aaatttccat 2280
186 gcatcacctc ctctagaat tcacccctca ccattcctta tataattgat ttattgtaaa 2340
187 gactcagaaa taaatcaaac atttactata gaaaaattga gaaggggagc tctgggggtg 2400
188 gaaacatatt agggtaaaag acttaaaatt ggaggcagca ttatcagaag atgaagaaca 2460
189 actcagggat ggggtgggaa gaagacaggt ccttttctgk acttcttaga caacctccat 2520
190 tattccctaa gggatcaggt gttgtgtctg totacytttt tttttttttt ttgtgccagt 2580
191 aattttacaa actctccctt ttctaggcac ccgaactctc tgccatcttc tctcctggga 2640
192 tgcagtcatc ccatttgtat gcctcatact tctctaccc tggtagattc tttcaagatc 2700
193 cttgggcttt actttcctca cataactcag ttattctgt tctagtttac cattttattc 2760
194 tggaaattga gagtcccatc caggggtgga cttatgacac tactgaaact tagacttcaa 2820
195 ggttcctcac ctacagggcc ctcttctgt gctctaataa tatagagggc tcgatggata 2880
196 tgtgttcata tgtaacagg cttttgtaaa aattgcagaa ataagatttt aacagcaatt 2940
197 gcttaaagcc aattgtatgt gtaatttttt ttcttaaaga ctcccaattt tgtaatatte 3000
198 aggcaccaca gaaccaagat ctgccccaaa cttagctatt ggcattcccg tctcaaattc 3060
199 tgttgtctta tgaaaaatcg aagaagaaaa taagtctga ccccttacc cccagaccca 3120
200 cctgttctt atccccaggc acctccctc cagaaacgca ggtctctgt ctccccggc 3180
201 ttcagcatgg acaggtgtgg gagggggctg gggatcaggc caggggaagt gggcgccagt 3240
202 ggtaactctt ctctgatccc cgtctttcct gctgccagt aatcgaacgc cacactcagg 3300
203 tgatgaga aaccttacc gcgcgcactg caatgcctc ccttctactc tgcacctcc 3360
204 accccctga aattctgccc ttaggctacg gggcgtctc ctttgcacc ttccccacc 3420
205 caccctcagt tgcgccacc ccttccctc cctacctgt tctgcctcc agtcccggt 3480
206 ttccacgagg ctgcggtctc tcttgtccc tgcctggcta cacttccctg ggtccacct 3540
207 cctcccagac tgagcctgc cggtgtcagg cagagccag cagargcgg caggggtgctg 3600
208 ggagaccctg agtcccacc acgttttccc ctgtggggtt ccttgcgacc ttcgctggaa 3660
209 ccttttccag cctgctgct cctaggattt cacctaattg actttctcag cctgtccac 3720
210 ccatcccaac cctggccagg cctctgcgc tcttccccac atcttttct tccgtgtacc 3780
211 ccttccctcg tcttttctca attccatgtc ctgtctccct ttcttaggt tctgtctacc 3840
212 cagccccagg ctcccttcca cgacccacc actccctcaa accagcctcc cttcgtacc 3900
213 caactcgttc cctccaaaac cgtttcctct cccccacatc ctcaagtctt cactgtatcg 3960
214 actcatactc ccacttcaga cctcagggc cagccccgtt tctctcccg cccactcgca 4020
215 tcttccctt cctaccctgg ttctcctgt cttcagcctc ccgcggtcc ctcgcccac 4080
216 ccgcctctc tggcagccc cgtccccatt tctctctccc tgggtctccc ttaagtgaga 4140
217 tccctccctt ccttttctgt tctttctc ctcgaggttg catccccct cccctccccg 4200
218 cccctccgac tgcctctccc acctcggcgc tgccttccct ccccgcccc tctctgctc 4260
219 cccagctccc gccgcctccc ccacccccg ctgcgcgcg ccgcctgta cgtcagagcc 4320
220 cctccccagc cccacatctc cctctgctc cctctctcc cctcgtcg tcagtcagtc 4380
221 cgcgaggaga gtccgcggtg gcggcgacg tggcgagagc cgcggggggt gtaggaagcc 4440

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/622,745

DATE: 06/28/2001

TIME: 10:42:28

Input Set : A:\Pto.amc

Output Set: N:\CRF3\06282001\I622745.raw

```
222 aaccttccct gcttctccgg ggccctcgcc ccctcctccc cacaaaatca gggatggagg 4500
223 cgctccccg gcacctctt agcagccctc cccgggaaaa gtgtcccccc tgagctccta 4560
224 acgtcccca acagctaccc ctgcccccca cgcc 4594
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/622,745

DATE: 06/28/2001

TIME: 10:42:29

Input Set : A:\Pto.amc

Output Set: N:\CRF3\06282001\I622745.raw

L:8 M:270 C: Current Application Number differs, Replaced Application Number
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date